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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,543	01/20/2004	Thomas Handal	0655/66454-A	2852

7590 09/08/2005

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EXAMINER

INGBERG, TODD D

ART UNIT	PAPER NUMBER
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2193

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/761,543

Applicant(s)

HANDAL, THOMAS

Examiner

Todd Ingberg

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/20/04 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/14/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claims 1 – 21 have been examined.

Effective filing date is April 17, 2002 based on 60/373,120.

Information Disclosure Statement

1. The Information Disclosure Statement filed June 14, 2004 has been considered.

Drawings

2. The drawing filed January 20, 2004 are accepted.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1 – 21 are rejected under 35 U.S.C. § 101. The claimed invention is not tangible.

The one possible way to overcome this rejection is shown below.

Claim 1

A kernel module modification apparatus **stored on a computer readable medium and executing on a computer** for adapting for a kernel on a target system a compiled kernel module corresponding to another kernel version which is different from the kernel on the target system, comprising:

a kernel analyzer adapted to extract from the kernel on the target system an error check measure and a kernel version identification; and

a module adaptation component adapted to insert in the compiled kernel module an error check parameter corresponding to the error check measure extracted by the kernel analyzer from the kernel on the target system, and to replace a version identification in the compiled kernel module with the kernel version identification extracted by the kernel analyzer from the kernel on the target system.

Claim 10

A method **stored on a computer readable medium and executing on a computer**

for adapting for a kernel on a target system a compiled kernel module corresponding to another kernel version which is different from the kernel on the target system, comprising:

extracting from the kernel on the target system an error check measure and a kernel version identification;

inserting in the compiled kernel module an error check parameter corresponding to the error check measure extracted from the kernel on the target system; and replacing a version identification in the compiled kernel module with the kernel version identification extracted from the kernel on the target system.

The current claim status is presented below.

Claim 1

A kernel module modification apparatus for adapting for a kernel on a target system a compiled kernel module corresponding to another kernel version which is different from the kernel on the target system, comprising:

a kernel analyzer adapted to extract from the kernel on the target system an error check measure and a kernel version identification; and

a module adaptation component adapted to insert in the compiled kernel module an error check parameter corresponding to the error check measure extracted by the kernel analyzer from the kernel on the target system, and to replace a version identification in the compiled kernel module with the kernel version identification extracted by the kernel analyzer from the kernel on the target system.

Claim 2

The apparatus of claim 1, wherein the compiled kernel module into which the error check parameter is inserted is binary.

Claim 3

The apparatus of claim 1, wherein the modified, compiled kernel module, which has inserted therein the error check parameter and bears the kernel version identification extracted from the kernel on the target system, is loadable into the kernel on the target system.

Claim 4

The apparatus of claim 1, wherein the error check measure includes one or more checksums extracted by the kernel analyzer from the kernel on the target system.

Claim 5

The apparatus of claim 1, wherein the kernel analyzer locates a symbol table in the compiled kernel module and, for each symbol name in the symbol table, performs an analysis of the symbol name.

Claim 6

The apparatus of claim 5, wherein the symbol name analysis performed by the kernel analyzer includes comparing the symbol name to symbols in the kernel on the target system.

Claim 7

The apparatus of claim 6, wherein if the symbol name is matched to a symbol in the kernel on the target system, the kernel analyzer extracts a checksum associated with the matched symbol and the module adaptation component appends the extracted checksum to the symbol name in the symbol table-of the compiled kernel module.

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Claim 8

The apparatus of claim 5, wherein the module adaptation component adjusts one or more offsets of the symbol table, after the symbol names are analyzed

Claim 9

The apparatus of claim 1, wherein the compiled kernel module is a loadable Linux kernel module.

Claim 10

A method for adapting for a kernel on a target system a compiled kernel module corresponding to another kernel version which is different from the kernel on the target system, comprising: extracting from the kernel on the target system an error check measure and a kernel version identification; inserting in the compiled kernel module an error check parameter corresponding to the error check measure extracted from the kernel on the target system; and replacing a version identification in the compiled kernel module with the kernel version identification extracted from the kernel on the target system.

Claim 11

The method of claim 10, wherein the compiled kernel module into which the error check parameter is inserted is binary.

Claim 12

The method of claim 10, wherein the modified, compiled kernel module having inserted therein the error check parameter and bearing the kernel version identification extracted from the kernel on the target system is loadable into the kernel on the target system.

Claim 13

The method of claim 10, wherein the extracted error check measure includes one or more checksums extracted from the kernel on the target system.

Claim 14

The method of claim 10 further comprising locating a symbol table in the compiled kernel module and, for each symbol name in the symbol table, performing an analysis of the symbol name.

Claim 15

The method of claim 14, wherein the symbol name analysis includes comparing the symbol name to symbols in the kernel on the target system.

Claim 16

The method of claim 15, wherein if the symbol name is matched to a symbol in the kernel on the target system, a checksum associated with the matched symbol is extracted and then appended to the symbol name in the symbol table of the compiled kernel module.

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Claim 17

The method of claim 14, wherein offsets of the symbol table are adjusted after the symbol names are analyzed.

Claim 18

The method of claim 10, wherein the compiled kernel module is a loadable Linux kernel module.

Claim 19

A system, comprising: a processor; and a program storage device readable by the system, tangibly embodying a program of instructions executable by the machine to perform the method of claim 10.

Claim 20

A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform the method of claim 10.

Claim 21

A computer data signal embodied in a transmission medium which embodies instructions executable by a computer to perform the method of claim 10.

Correspondence Information

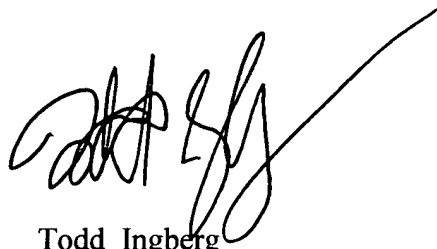
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Todd Ingberg whose telephone number is (571) 272-3723.

The examiner can normally be reached on during the work week..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 571 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Todd Ingberg', with a long, sweeping horizontal line extending to the right.

Todd Ingberg
Primary Examiner
Art Unit 2193

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